

Amendments to the Drawings:

Figure 1 has been amended to add reference numerals 17 and 18 as required by the Examiner in numbered section 1 of the Office Action.

REMARKS

By this amendment, Applicants have amended the claims to more clearly define their invention. In particular, claims 1 and 4 have been amended to recite that at least one of the positive electrode active material and the negative electrode active material carries activated carbon. See, e.g., the last full paragraph on page 8 of Applicants' specification. Claim 1 has also been amended to clarify that the device has an operating voltage range of 0-2 V to 4.0-4.2 V. See, e.g., page 3, first paragraph. Applicants have also added claims 12-18 to define further aspects of the present invention. Claims 12 and 13 are supported by, e.g., the description in the last full paragraph on page 8 of Applicants' specification. Claims 14-18 are supported by, e.g., the description at page 3, line 1 et seq. of Applicants' specification.

Applicants have also amended Figure 1 to add the reference numerals 17 and 18, as required by the Examiner in numbered section 1 of the Office Action. In view of the foregoing amendments to the drawings, reconsideration and withdrawal of the objection to Figure 1 are requested.

Claims 1-8 and 11 stand rejected under 35 U.S.C. 102(b) as allegedly being anticipated by U.S. Patent No. 5,665,491 to Tomiyama et al. Applicants traverse this rejection and request reconsideration thereof.

The present invention relates to an electrochemical energy storage device including a positive electrode provided with a positive electrode collector and a positive electrode active material which can occlude/emit a metal ion, e.g., lithium, a negative electrode provided with a negative electrode collector and a negative electrode active material which can occlude/emit the metal ion, e.g., lithium, a minutely porous separator held between the positive electrode and the negative

electrode, and an organic electrolyte. According to the present invention, one of the positive electrode active material and the negative electrode material carries activated carbon. In another aspect of the present invention, the positive electrode collector and the negative electrode collector may be made of carbonaceous material. By adding activated carbon to the positive electrode active material and the negative electrode active material and, optionally, to the collector, any electric double-layer capacitance can be acquired and a higher voltage property can be achieved. Moreover, by using a collector made of carbonaceous material, the collector is not eluted in the presence of electrolyte during charging or discharging, thereby enabling the operating voltage range to be expanded. For example, as set forth in claim 1, the device can have an operating voltage range of 0-2 V to 4.0-4.2 V.

The patent to Tomiyama et al. discloses a nonaqueous secondary battery comprising a positive electrode sheet having a current collector, an electrode material mixture layer containing a lithium-containing transition metal oxide as a positive electrode active material, a negative electrode sheet having on a current collector and an electrode material mixture layer containing a negative electrode material capable of intercalating and deintercalating lithium, and a nonaqueous electrolyte containing a lithium salt. While the patent to Tomiyama et al. discloses carbon material as an example of a collector for a battery, this patent does not disclose that the active material carries activated carbon.

Merely using a porous carbon material in the collector, as in Tomiyama et al., does not ensure a higher operating voltage as can be obtained by the present invention. Moreover, at least with respect to claim 1 and the claims dependent thereon, the Tomiyama et al. patent discloses that the operating voltage range is

from 2.8 to 4.0 V, but does not disclose a lower limit of the operating voltage range of 0-2 V, as set forth in claim 1.

For the foregoing reasons, the Tomiyama et al. patent does not anticipate the presently claimed invention.

Claims 9 and 10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Tomiyama et al. and further in view of JP 9-259891. Applicants traverse this rejection and request reconsideration thereof.

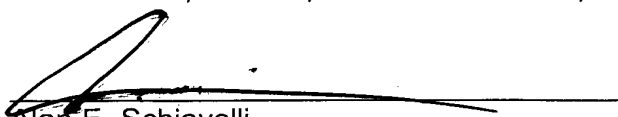
JP 9-259891 discloses a nonaqueous electrolyte secondary battery and has been cited by the Examiner as allegedly disclosing positive and negative electrode collectors and active materials being held on a plastic or metallized plastic sheet. However, clearly nothing in JP 9-259891 remedies any of the basic deficiencies noted by with respect to Tomiyama et al. Accordingly, claims 9 and 10 are patentable over the proposed combination of references.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of all of the claims now in the application are requested.

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Respectfully submitted,

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